
APPENDIX D WILD AND SCENIC RIVERS

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Introduction

National

On October 2, 1968, Congress signed the Wild and Scenic Rivers Act. This Act established the National Wild and Scenic Rivers System, stating, “It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in a free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations” (Sec. 1(b)).

The Act also states, “In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas...” (Sec. 5(d)). In 1982 the National Park Service first published a Nationwide Rivers Inventory that now lists more than 3,400 US river segments that are believed to have characteristics making them eligible for inclusion in the National Wild and Scenic Rivers System. This list is not exhaustive, however, and other free-flowing river segments within the Forest possessing one or more outstandingly remarkable should be addressed as well.

Green Mountain National Forest

There are currently no federally designated wild, scenic, or recreational rivers within the State of Vermont. Potential wild and scenic rivers (WSRs) were addressed in the Green Mountain National Forest’s 1987 Forest Plan. At that time, only those rivers studied in the Nationwide Rivers Inventory were determined eligible for inclusion into the National Wild and Scenic Rivers System; the Forest Service did not evaluate the eligibility of other rivers on the Forest. As part of a settlement with American Rivers, the 1987 Forest Plan was amended in August 1988 to add a category of “Significant Streams.” This term was used for river segments on the Forest that would receive interim standard and guideline direction until their eligibility for the National Wild and Scenic Rivers System could be evaluated. This amendment, Forest Plan Amendment 1, states, “...a final determination of the river’s classification will be based on studies to be conducted during the next ten to fifteen years.”

The Wild and Scenic Rivers Act directs federal agencies to identify eligible WSRs in their planning processes. Forest Service planners began this process in January 2003. The Forest Service may only recommend a river as eligible and suitable for wild and scenic river status. Designation of a river occurs through an act of Congress.

Assessment Process

Assessment of a river’s potential as a wild and scenic river follows a three-step process:

1. Determination of Eligibility
2. Potential Classification (Wild, Scenic, Recreational)
3. Determination of Suitability

The wild and scenic rivers eligibility study will complete only Steps 1 and 2. The third step, determination of suitability, involves extensive public input and addresses the social and political issues of designation. The suitability study also determines if there is sufficient public support for a river's designation.

Eligibility

As defined by the Wild and Scenic Rivers Act, a wild and scenic river (WSR) must be free-flowing and possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. Determination of eligibility was based on these criteria. As used in the Act, the term "river" means, "a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes" (Sec.16(a)). The Act sets no specific requirements concerning the length of a river segment being considered, but states that a river segment is of sufficient length if, when managed as a wild, scenic or recreational river area, the outstandingly remarkable values are protected.

The first step in this process was the identification of waterways within the Green Mountain National Forest and a determination of whether those identified were eligible to be added to the National Wild and Scenic Rivers System. An interdisciplinary team of GMNF specialists was formed to conduct these evaluations. After completion of the initial eligibility study, a public group representing watershed councils from across the Forest discussed the draft results. Forest planners did not receive any information from the watershed council discussions that altered the specialists' findings.

Rivers listed as eligible in the 1987 Forest Plan were still considered eligible and their potential classifications remained the same. These included: Bolles Brook, Deerfield River, Lye Brook, New Haven River, Otter Creek, Roaring Branch, City Stream, Wardsboro Brook, West River, White River and the Winhall River. Because the GMNF has acquired more than 90,000 acres of land since the original classification of these rivers, the boundaries for these river segments were re-examined. New boundary descriptions were then established where warranted by changes in ownership. Also, a few of the original boundary descriptions were written erroneously or had incorrect names, and in those cases additional corrections were made.

Finally, new rivers were added as eligible because of expansion of National Forest lands: the Mad River, the Ottauquechee River, the Batten Kill River and the Rock River. These rivers were all studied in the Nationwide Rivers Inventory, and the Forest Service acquired property adjacent to these streams.

As a second step in the eligibility process, Forest planners studied those rivers listed as Significant Streams in the 1987 Forest Plan Amendment 1. These include: Abbey Brook, Austin Brook, Bickford Brook, Big Black Branch, Big Branch, Bingo Brook, Bourn Brook, Brandon Brook, Chittenden Brook, Fayville Branch, Feller Brook, Glastenbury River, Greendale Brook, Hancock Branch, Hell Hollow Brook, Homer Stone Brook, Lake Brook, Leicester Hollow Brook, Mad Tom Brook, Meadow Brook, Middlebury River, Middlebury North Branch, Middlebury South Branch, Mount Tabor Brook, Rake Branch, Redfield Brook, Stamford Stream, Steam Mill Brook, Stetson Brook, South Fork Roaring Branch, Townsend Brook, Utley Brook, West Branch Deerfield River (a.k.a. Deerfield West Branch), West Branch of Tweed River (a.k.a. Michigan Brook), and West Branch of White River (a.k.a. just West Branch). One Significant Stream, Sucker Brook, was dropped from further study as it was determined that it would not qualify as a free-flowing river. Forest planners also updated boundaries of the Significant Streams, in acknowledgement of new ownership patterns, and corrected a few of the original boundary descriptions that were erroneously written or used incorrect names.

Finally, free-flowing rivers that appeared to have potential for containing an outstandingly remarkable value, but were not included in either the Nationwide Rivers Inventory or the Significant Stream list, were evaluated. This step included consideration of rivers within the scope of new Forest ownership, or streams that, due to recent property acquisitions, had significant adjacent National Forest land ownership. These included Cheney Brook, Ellis Brook, Gould Brook, Jimmy Dean Brook, Middlebrook, and Sargent Brook.

Eligibility Criteria by Resource

For a river to be eligible for wild and scenic designation it must be free-flowing and the river or adjacent land must contain a feature that is determined to be outstandingly remarkable in one or more of the following values:

- Scenic
- Recreational
- Geologic
- Fish and Aquatic
- Wildlife
- Heritage
- Botanical and Ecological

Forest planners used criteria from interagency example protocol and other National Forests to evaluate river eligibility. Determinations were made based on Forest Service specialists' professional judgments. If a free-flowing river, or segment of a river, was found to have a Class A ranking for any value category, it was determined eligible. Within each outstandingly remarkable value category, rivers were rated as follows.

Scenic Values

Forest planners based scenic value assessments on concepts described in the USDA Forest Service Scenery Management System (SMS). Rivers that ranked as Class A – Distinctive under the SMS qualified for an Outstanding designation in this study. Rivers that ranked as Class B – Typical qualified as Substantial and those that ranked as Class C – Indistinctive qualified as Locally Common. The following criteria were used to assess areas where adjacent landform, rock form, vegetation, water features, cultural features, and distant scenery, either in combination or individually, provide Class A, B, or C scenery. A list of all Outstandingly Remarkable Rankings for the 2004 Evaluation is provided in Table D-2.

(A) Outstanding – The river and adjacent lands offer scenic values of national or regional significance. These are areas where landform, rock form, vegetation patterns, water characteristics, cultural features, or offsite views provide unusual, unique or outstanding scenic quality either in combination or individually. These areas may include the presence of “special places.” The Scenery Management System describes special places as, “Those specific locations and expanses in outdoor settings that have attractions and features that are identified as unique, different, distinctive, and extraordinary to people” (USDA Forest Service 1995). Special places may include landforms with unusual or outstanding topographic features such as ledges, gorges, rock outcrops or large, in-stream boulders. Water forms may exhibit unusual flow characteristics, falls, cascades, meanders or pools. Middleground or background views, of mountains or cultural landscapes for example, may be dominant and enhance total scene being viewed. They may possess a moderate to high number of special places or an individual special place may be of such magnitude to warrant an Outstanding ranking.

(B) Substantial – The river and adjacent lands offer scenic values of local significance. These are areas where landform, rock form, vegetation patterns, water characteristics, cultural features, or offsite views provide scenic quality that is less than outstanding but more than incidental, either in combination

or individually. They may possess what would be considered a typical number of special places, none of which rank as outstanding, for the local area.

(C) Locally Common – The river and adjacent lands offer scenic values that are locally common. These are areas where landform, rock form, vegetation patterns, water characteristics, cultural features, or offsite views provide ordinary or common scenic quality, either in combination or individually. Rivers exhibit common meander and flow characteristics. Rock forms may be small features. Middleground and/or background views may not exist or may have little influence on the total scene being viewed. An occasional special place may be found, but in general the river and adjacent lands do not contain distinctive features.

Recreational Values

Forest planners used the following criteria to assess each river's recreational values. The criteria are based on three components: span of attraction, water sports and fishing. A river must meet at least one of the "or" statements to meet the standards of that ranking.

(A) Outstanding- Visitors are willing to travel from outside the geographic region (ecoregion) to use the river for recreational purposes. Information on the river is routinely included in national publications. OR: The river provides unusual canoeing and boating opportunities, containing a variety of rapids and sufficient access points to allow a variety of trip lengths. OR: Fishing success rate, size of take and game species composition is unusual for the geographic region.

(B) Substantial- Visitors are willing to travel from other locations in the geographic region to recreate along the river and its corridor. Information on the river is routinely included in regional publications. OR: The river provides some opportunities for canoeing and boating, containing some rapids, but access limitations reduce flexibility in trip planning. OR: Fishing success rate and size of catch may be above average for local area, but are common throughout the geographic region.

(C) Locally Common- Visitors do not often travel long distances to visit the river for recreational purposes. Most visitors are from the local area. OR: The river provides limited, if any, opportunities for canoeing and boating. River access may be limited and low water flows in the summer limit opportunities for other water sports. OR: Fishing success rate and size of catch are common for the area.

Geologic Values

(A) Outstanding – The river and its corridor contain one or more geologic features that are rare, unusual, or unique to the region (defined as Vermont's Green Mountains, Taconic Mountains, and Champlain Basin). Examples include: high falls, long & steep cascades, caves, large or frequent outcrops or boulders, potholes, oddly-shaped or highly-folded rock formations, gorges, glacio-fluvial deposits, or talus slopes.

(B) Substantial – The river and its corridor contain one or more geologic features that are significant (uncommon) in the local area (defined as the southern Green Mountains), but typical of geologic features found throughout the region.

(C) Locally Common – The river and its corridor contain one or more geologic formations that are locally common to the region, but no significant geologic features.

Fish and Aquatic Values

(A) Outstanding – The river contains fish populations or aquatic communities that occur only because of the character of the river. The river also provides exceptionally high quality habitat for fish and aquatic organisms of national importance or may provide unique habitat or a critical link in habitat conditions.

(B) Substantial – The river contains fish populations or aquatic communities of State or regional importance. The river also provides high quality habitat for fish and aquatic organisms, however, these types of areas are common throughout the State.

(C) Locally Common – The river contains fish populations that are not unique, rare, or critical. The river also provides habitats that are common throughout the Forest or local physiographic area.

Wildlife Values

(A) Outstanding – The river corridor provides exceptionally high-quality habitat for federally endangered, threatened, or proposed species.

(B) Substantial – The river corridor provides high-quality habitat for species listed as sensitive on the Regional Forester's Green Mountain National Forest list or on the State of Vermont's list.

(C) Locally Common – The river corridor provides wildlife habitat that is common to that river section, indicating that wildlife and wildlife habitats are not significant, rare, or critical.

Heritage Resource (Prehistory and Historic Values)

Heritage Resources include archaeological sites, historic structures, Native American traditional use sites, and cultural landscapes.

(A) Outstanding – Heritage resources within the river's corridor are regionally unique or rare, are well preserved, and offer exceptional research or interpretive values of national significance. These heritage resources are on, or eligible for, the National Register of Historic Places (NRHP).

(B) Substantial – Heritage resources within the river's corridor are representative of the region, generally well preserved, and offer research and interpretive values of State and local significance. Many are eligible for the NRHP.

(C) Locally Common – Heritage resources within the river's corridor are few, predictable, unremarkable and/or disturbed. They offer moderate or minimal research and interpretive value above the local level.

Botanical and Ecological

(A) Outstanding – The vegetation along the river corridor is continuous, with little evidence of human-caused fragmentation or human disturbance. Riparian features, or associated geologic or geomorphic features, that harbor unique plants or rare natural communities may be present and there are no exotic and/or invading weeds present. The area within the river corridor could provide habitat for federally protected plant species or a number of plant species considered rare or uncommon within the ecoregion.

Specific criteria:

- The corridor includes at least one threatened and endangered (TES) plant species or at least three plant species ranked S1-S3 (NatureServe 2004), OR
- The corridor includes at least one rare natural community (ranked S1-S2), OR

- For streams less than 20 mi², the corridor has at least six miles of continuous natural vegetation, primarily along the banks., OR
- For streams greater than 20 mi², the corridor has at least 4 miles of continuous natural vegetation, primarily along the banks.

(B) Substantial – The vegetation along the river corridor is largely continuous. There may be some limited fragmentation caused by human activity and some uncontrolled invasion by exotic and/or invasive weeds. The invasions, however, are localized enough to be controllable. Riparian or associated features may harbor high quality examples of uncommon or locally significant natural communities. Plants considered rare in the ecoregion may be present.

Specifics:

- Half-mile corridor has at least one or two plant species ranked S1-S3, OR
- Corridor includes at least one natural community (ranked S3-S5) in high quality condition (A, B, or A/B quality), OR
- For rivers less than 20 mi², the corridor has two to six miles of continuous natural vegetation, primarily along the banks OR
- For rivers greater than 20 mi², the corridor has one to four miles of continuous natural vegetation, primarily along the banks.

(C) Locally Common – The river corridor's natural communities are generally common to the area and the area may be greatly disturbed or highly fragmented. Highly disturbed natural communities or human-created plant communities (such as active agricultural fields or conifer plantations) may be present and there may also be some uncontrollable invasions of exotic weeds.

Note: natural vegetation is defined as forested uplands and wetlands, and open wetlands and naturally caused barrens (for example, talus, landslides, cliffs), that is at least 25 years old and not fragmented by a paved road or highway.

Tables D-3 and D-4 list these resource areas' comments on river segments' outstandingly remarkable values.

Classification Criteria

The second step in the assessment process involves a determination of potential classification. The Wild and Scenic Rivers Act states that each river included in the National Wild and Scenic Rivers System shall be classified, designated, and administered as one of the following: a wild river area, a scenic river area or a recreational river area (Sec. 2(b)). Classification is based on the conditions of the river and adjacent land at the time of evaluation. A river may be divided into segments by these classifications, so that one portion of the river may be classified Wild, while another segment may be classified Recreational.

A potential classification determination is needed to guide management of the river and surrounding land until a wild and scenic river suitability study is completed. Once identified as eligible for designation, management and development of a river and its corridor will protect, and to the extent practical, enhance, outstandingly remarkable values. The river and its corridor will not be modified to the degree that eligibility or classification will be affected. Each classification is described below.

Wild Rivers – Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with essentially primitive watersheds or shorelines and unpolluted waters. These represent vestiges of primitive America.

Scenic Rivers – Those rivers or sections of rivers that are free of impoundments and have largely primitive and undeveloped shorelines, but are accessible by roads.

Recreational Rivers – Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

It should be noted that there is often confusion over these naming protocols. Wild rivers are not necessarily fast-moving whitewater rivers, scenic rivers may not be recognized for any scenic values, and recreational rivers may not receive heavy public use. Furthermore, classification as wild, scenic, or recreational is based on the river area's level of development and not on its outstandingly remarkable values. A river classified as Recreational, such as portions of the Batten Kill, may therefore possess values that have nothing to do with recreation.

For rivers listed as eligible in the 1987 Forest Plan, potential classifications were not reconsidered. For rivers found eligible during this plan revision, potential classifications were assigned based on the above definitions. Table D-1 lists Eligible Wild, Scenic, and Recreational Rivers' potential classifications.

Table D-1: Eligible Wild, Scenic, and Recreational Rivers with Associated Potential Classification, Location Description, and Outstanding Remarkable Values			
Name	Potential Classification	Description	Outstandingly Remarkable Value
Batten Kill River	Recreational	From NY/VT state line to Arlington	Historic, Geologic, Scenic
Batten Kill River	Recreational	Arlington to Manchester	Fish, Historic, Wild
Big Branch*	Scenic	Confluence of Otter Creek to Ten Kilns Brook	Heritage
Bolles Brook	Scenic	From last bridge to headwaters	Wildlife
Bolles Brook	Recreational	From Roaring Branch Walloomsac Brook to last bridge crossing	Wildlife
Bourn Brook*	Wild	From wilderness boundary to headwaters	Botanical/ Ecological
Bourn Brook*	Recreational	From confluence of Otter Ck to wilderness boundary	Botanical/ Ecological
City Stream	Recreational	Confluence Roaring Branch Walloomsac Brook to Woodford	Wildlife
Deerfield River	Scenic	Searsburg Reservoir to headwaters	Hydrologic, Wild
Leicester Hollow Brook	Scenic	End of FS Rd 243 to headwaters	Botanical/ Ecological
Leicester Hollow* Brook	Recreational	Neshobe River to end of FS Rd. 243	Botanical/ Ecological
Lye Brook	Wild	From wilderness boundary to headwaters	Fish, Historic, Wild
Lye Brook	Recreational	Confluence of Batten Kill to wilderness boundary	Fish, Historic, Wild
Mad River	Recreational	From Folsom Brook to headwaters	Recreation
North Branch Middlebury River*	Recreational	From confluence of Middlebury River to confluence of Alder Brook	Botanical/ Ecological
New Haven River	Recreational	Within proclamation boundary	Geologic
Ottawaquechee River	Recreational	From Woodstock to the headwaters	Recreation
Otter Creek	Recreational	From Emerald Lake to East Ck in Rutland	Hydrologic
Roaring Branch (including a section of Warm Brook and Branch Pond Brook)	Recreational	Confluence of Batten Kill River to Branch Pond	Fish, Historic, Wild
Rock River	Scenic	End of Sherman Road (TH-18), in Dover, to headwaters	Geologic, Recreation, Scenic,
Rock River	Recreational	Confluence of West River to the end of Sherman Road (TH-18), in Dover, to headwaters	Geologic, Recreation, Scenic,
Stamford Stream*	Recreational	Confluence of City Stream to Woodford and Stamford town line	Botanical/ Ecological

Wardsboro Brook	Scenic	Confluence of West River to first bridge upstream on VT100 in Jamaica Town	Recreation, Scenic
Wardsboro Brook	Recreation	First bridge upstream on VT100, in Jamaica, to headwaters	Recreation, Scenic
West River	Scenic	Bridge on VT100 just east of JCT VT155/VT100, in Weston, to headwaters	Recreation, Scenic
White River	Recreational	Stony Brook, in Stockbridge, to headwaters	Fish, Historic, Scenic,
Winhall River	Wild	End of Kendall Farm Road to headwaters	Recreation, Scenic
Winhall River	Scenic	Confluence of West River to end of Kendall Farm Road	Recreation, Scenic
* These rivers are eligible based on GMNF review, and their Outstanding Remarkable Value categories differ slightly from those of the NRI-based rivers.			

Table D-2: Listing of all Outstandingly Remarkable Value Rankings for 2004 WSR Evaluation							
STREAM	Heritage Ranking	Scenic Ranking	Recreation Ranking	Geologic Ranking	Fisheries/Aquatic Ranking	Wildlife Ranking	Botanical/Ecological Ranking
Abbey Brook	C	B	C	B-	C	C	B
Austin Brook	C	C	C	C	C	C	C
Bickford Brook	C	C	C	C	C	C	B
Big Black Branch	C	C	C	C	C	C	C
Big Branch ¹	A	B+	C	B+	C	C	B
Bingo Brook	B	B	C	B	C	C	C
Bourn Brook ¹	B	B	C	B-	C	C	A
Brandon Brook	C	C	C	C	C	C	C
<i>Cheney Brook</i> ²	B	C	C	C	C	C	C
Chittenden Brook	C	C	B	C	B	C	B
<i>Ellis Brook</i> ²	B	C	C	C	C	C	C
Fayville Branch	C	C	C	C	C	C	B
Feller Brook	B	C	C	C	C	C	B
Glastenbury River	C	B	C	C	C	C	B
<i>Gould Brook</i> ²	C	C	C	C	C	C	B
Greendale Brook	B	C	C	C	C	C	B
Hancock Branch	C	B+	C	B+	C	C	B/C
Hell Hollow Brook	C	C	C	C	C	C	B
Homer Stone Brook	B	C+	C	C+	C	C	C
<i>Jimmy Dean Brook</i> ²	C	C	C	C	C	C	B
Lake Brook	C	C	C	C	C	C	B
Leicester Hollow Brook ¹	B	B+	B	B-	B	C	A
Mad Tom Brook	B	B	C	C+	C	C	C
Meadow Brook	C	C	C	C	C	C	C
<i>Middlebrook</i> ²	B	C	C	C	C	C	B
Middlebury River	B	B+	C	B	C	C	B/C
Middlebury No Br. ¹	C+	B	B	B-	B	C	A
Middlebury So Br.	B+	B	B	C	B	C	C
Mount Tabor Brook	B	C	C	C	C	C	B
Rake Branch	C	C	C	C	C	C	B
Redfield Brook	C	C	C	C	C	C	B
<i>Sargent Brook</i> ²	C	C	C	C	C	C	B
Stamford Stream ¹	B+	C	C	C	C	C	A
Steam Mill Brook	B	B	B	C	B	C	C
Stetson Brook	C	C	C	C	C	C	C
So Fork Roaring Branch	C	C	C	B-	C	C	B
Townsend Brook	B	C	C	C	C	C	B
Utley Brook	B	C	C	C	C	C	B

Table D-2: Listing of all Outstandingly Remarkable Value Rankings for 2004 WSR Evaluation							
STREAM	Heritage Ranking	Scenic Ranking	Recreation Ranking	Geologic Ranking	Fisheries/ Aquatic Ranking	Wildlife Ranking	Botanical/ Ecological Ranking
West Branch of Deerfield River (aka Deerfield West Branch)	B	B	C	C	C	C	B
West Branch of Tweed River (aka Michigan Br)	B	B	B	C	B	B	B
West Branch of White River (aka just West Branch)	C	C	B	C	C	C	C
Notes: ¹ Names in Bold were found Eligible ² Italic Names are '03 additions							

Table D-3: Resource Comments on Outstandingly Remarkable Values	
STREAM	COMMENTS
Abbey Brook	Heritage- 19 th century historic mill site. Locally significant. Scenic- Scenic wetland and pond- Special Place. Brook itself is not special. Recreation- Geologic- Frequent in-stream “stair-step” outcrops at elevations between 700-1,200 ft. Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached at end of this chart.
Austin Brook	Heritage- Representative 19 th century historic sites. Locally significant. Scenic-Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Bickford Brook	Heritage- Representative 19 th century historic sites; poorly preserved remains of 18 th c road. Locally significant. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Big Black Branch	Heritage- Representative 19 th century historic sites. Locally significant. Scenic-Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Big Branch	Heritage- Historic Silver Bridge (eligible for the NRHP) -- which we are about to remove; Indian route/portage; Old Job logging village (eligible for the NRHP as a District), charcoal kilns, CCC road construction, 19 th c. bridge abutments, other historic features make this a significant corridor through space/time. Scenic- Large in stream boulders- Special Place. Recreation- Some very limited water sport use in high water. Some swimming. Geologic- Frequent in-stream large boulders. Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Bingo Brook	Heritage- Many reasonably well-preserved 19 th century logging, mill, school and home sites, as well as a well-maintained cemetery. Of state and local significance; probably eligible to the NRHP as a District, but does not rise to the level of “outstandingly remarkable”. Scenic- Cascades, rock outcrops-Special Place. Recreation- Some very limited water sport use in high water. Geologic- Low outcrops and cascades occupy about 20% of the length. Some exposed bedrock in the stream. Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Bourn Brook	Heritage- Historic and industrial era remains within the Congressionally designated Lye Brook Wilderness area provide interesting interpretive opportunities of state/local significance. Confluence with the Batten Kill very high likelihood of precontact Native American archaeological remains. Scenic- Downers Glen Area-Special Place, cascades, wetlands. Recreation- Geologic- Some cascades/small falls in Downers Glen. Fisheries/Aquatic- Typical upland stream, common fish/aquatic biota populations. Wildlife- The river corridor habitat is common in area.
Brandon Brook	Heritage- Representative 19 th century historic sites. Locally significant. Scenic-Recreation- Some very limited water sport use in high water. Geologic-Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached

Cheney Brook	Heritage- Representative 19 th century historic sites and cemeteries present, as well as the possibility of precontact Native American sites. State and local significance. Scenic- Recreation- The river corridor provides wildlife habitat that is common to the area. Geologic- Fisheries/Aquatic- Typical upland stream with common fish/aquatic biota populations. Wildlife- Botanical and Ecological- see attached
Chittenden Brook	Heritage- Locally significant mill remains (in poor condition) and splash dam related to the early 20 th century logging industry. Locally significant. Scenic- Recreation- Rated B for fishing attributes. Geologic- Fisheries/Aquatic- High native brook trout productivity. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Ellis Brook	Heritage- Representative 19 th century historic sites and cemeteries present, as well as the possibility of precontact Native American sites. State and local significance. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Fayville Branch	Heritage- No documented heritage sites within the corridor, but the confluence with Warm Brook is a high probability location for precontact Native American sites. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Feller Brook	Heritage- Several 19 th c. house and mill sites. Local significance. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Glastenbury River	Heritage- Representative 19 th century historic sites, ties to logging. Locally significant. Scenic- Vegetative variety, natural openings, beaver pond. Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- Botanical and Ecological- see attached
Gould Brook	Heritage- No documented heritage resource sites within this corridor. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Greendale Brook	Heritage- Remains of a CCC camp, and late 18 th /early 19 th c. farm and mill sites that are significant to the development history of the town of Weston. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Hancock Branch	Heritage- Representative 19 th century historic sites. Locally significant. Scenic- Texas Falls Scenic Gorge- Special Place. Recreation- Some very limited water sport use in high water. Geologic- MA 8.1 Special Area for Geologic Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Hell Hollow Brook	Heritage- No known sites recorded. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached

Homer Stone Brook	Heritage- Locally significant historic sites. May have prehistoric potential based on abundance of quartzite outcrops/surface material. Scenic- Some shoots and small falls, hemlock stands. Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Jimmy Dean Brook	Heritage- No documented heritage resource sites within the corridor. Scenic-Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Lake Brook	Heritage- Locally significant --especially Griffith Lodge. Scenic- Recreation-Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Leicester Hollow Brook	Heritage- Numerous historic sites, including mines, farms, kilns and mills along this relatively short Brook. Area likely eligible as an NR District for state and local significance. Scenic- Large rock outcrops, unusually proportioned to size of small brook. Ferns adjacent to recreation trail. Special Place. Recreation- Rated B for fishing attributes. Geologic- Some steep side slopes and outcrops. Fisheries/Aquatic- High native brook trout productivity. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Mad Tom Brook	Heritage- 19 th century logging sites and a reported "gold mine" are of local significance. Scenic- Steep grades, small falls and steep cascades. Recreation- A minor amount of swimming by locals. Geologic- A few steep cascades and falls. Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Meadow Brook	Heritage- Representative 19 th century historic sites. Locally significant. Scenic-Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Middlebrook	Heritage- No documented heritage resource sites, but high potential for Indian use as a travel way through the gap, "behind" Deer Leap. Scenic- Recreation-Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Middlebury River	Heritage- Numerous 19 th century historic sites (standing structures & archaeological sites); cultural landscape; probable Indian route through the Gap; association with Robert Frost and Middlebury College's Bread Loaf campus. State-level significance. Scenic- Special Place- rock form. Located along state designated Scenic Byway (RT 125) Recreation- Some very limited water sport use in high water. Geologic- Few steep cascades and falls. Fisheries/Aquatic- Typical small river with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Middlebury North Branch	Heritage- Representative 19 th century historic sites. Locally significant. Scenic-Recreation- Rated B for fishing attributes. Geologic- Few steep cascades and falls. Fisheries/Aquatic- High native brook trout productivity. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological-

Middlebury South Branch	Heritage- Representative 19 th century historic sites. Locally significant. Potential for prehistoric use, especially along south bank, but no known sites. Scenic- Cultural resources of East Middlebury and Ripton Village and Breadloaf Campus. Recreation- Rated B for fishing attributes. Geologic- Fisheries/Aquatic- High native brook trout productivity. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Mount Tabor Brook	Heritage- Some 19 th century mill and farm sites present. Locally significant. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Rake Branch	Heritage- Representative 19 th century logging-related sites. Locally significant. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Redfield Brook	Heritage- Representative 19 th century logging-related sites. Locally significant. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Sargent Brook	Heritage- No documented heritage resource sites within this corridor. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Stamford Stream	Heritage- The vicinity of Stamford Meadows has an uncommon and significant cluster of NR-eligible archaeological sites: a large prehistoric encampment; historic tavern, house, mill and dam; and historic stage road -- all located within the stream corridor and along the Appalachian/Long Trail. These most certainly have state-level significance and are eligible for the NRHP, but don't rise to the level of "outstandingly remarkable". Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Steam Mill Brook	Heritage- Several historic farms, kilns and mills within the corridor have local and perhaps state significance, but are do not rise to the level of "outstandingly remarkable". Scenic- Secluded gorge, but not a lot of special geologic features. Recreation- Rated B for fishing attributes. Geologic- Fisheries/Aquatic- High native brook trout productivity. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Stetson Brook	Heritage- Representative 19 th century historic sites. Locally significant. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
South Fork Roaring Branch	Heritage- Representative 19 th century historic sites. Locally significant. Scenic- Recreation- Geologic- Frequent, in-stream large boulders. Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
Townsend Brook	Heritage- Representative 19 th century historic sites. State and local significance and interpretive value. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached

Utley Brook	Heritage- Representative 19 th c. house and mill sites; possible Indian portage route. State and local significance. Scenic- Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical/Ecological- see attached
West Branch Deerfield River	Heritage- Historic (mostly 19 th c) farm and mill sites of state and local significance; high prehistoric site <i>potential</i> (including travel link to Mohawk Trail in MA) but very few precontact sites identified to date. Scenic- Wetland, diverse vegetation, openings, meanders. Recreation- Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached
West Branch Tweed River	Heritage- Representative 19th century historic sites; possible Indian portage route. State and local significance. Scenic- Boulders, falls and pools. Recreation- Rated B for fishing attributes. Geologic- Fisheries/Aquatic- High native brook trout productivity. Wildlife- A mine that may provides potential habitat for bats is associated with this stream. Botanical and Ecological- see attached
West Branch White River	Heritage- Representative 19 th century historic sites. May constitute a locally significant District. Scenic- Recreation- Rated B for water sports. The stream provides water sports in periods of high water. Direct connection with the White River (NRI) and longer period of available water ranked this stream higher than other SS's. Geologic- Fisheries/Aquatic- Typical upland stream with common fish species and aquatic organisms. Wildlife- The river corridor provides wildlife habitat that is common to the area. Botanical and Ecological- see attached

Table D-4: Ecological/Botanical Resource Comments on Outstandingly Remarkable Values

STREAM	Rank	COMMENT
Abbey Brook	B	Based on rare plants and natural community; natural over substantial length but length is not long enough to be considered exceptional.
Austin Brook	C	One RFSS species is known from area (but is only S3 in state) and one 5 acre patch of older woods falls along the stream; reduced to B because the RFSS may not remain RFSS and there are no other rare plants, and natural community not considered significant at state level; natural over most of length although a gravel road does follow the corridor.
Bickford Brook	B	No TES, rare plants, significant natural communities; most of stream in natural vegetation except at the Bolles Brook confluence where there's some development and roading; a trail crosses the stream higher up but is not fragmenting.
Big Black Branch	C	No TES, rare plants, significant natural communities; natural vegetation over much of length interrupted by one stream crossing by FR 10.
Big Branch	B	No TES or rare plants; within the buffer is a significant larger old stand of enriched northern hardwoods that has very old trees in it - the area is about 50 acres or so. The middle portion of the stream is largely natural vegetation, ending at Silver Bridge at one end and at some cutting units at the east end.
Bingo Brook	C	No TES, rare plants, significant natural communities. Small stretches of 0.5-1 mile of natural vegetation - separated by openings maintained for wildlife or by openings associated with the roadway that follow the stream; road is gravel and may not act as a fragmenting feature - most of canopy is closed along road.
Bourn Brook	A	Includes extension; there are three significant natural communities in the buffer for this stream segment - Downer Glen, Little Mud Pond, and Bourn Pond (at source of Bourn Brook). Bourn and Little Mud Ponds have an abundance of rare plants each. Most of the original segment of the river is in natural vegetation.
Brandon Brook	C	No TES, rare plants, significant natural communities; segment is followed along banks in entirety by VT State Highway 73, so there's no real extent of natural vegetation along this segment.
Cheney Brook	C	No TES, rare plants, significant natural communities; the lower half is surrounded by development; the upper half is within the NF and is generally natural; the upper-most portion is typed as openland, but the NWI maps don't show it as wetland. If this is abandoned agriculture then the NV extent would be smaller by 0.6 mi.
Chittenden Brook	B	No TES, rare plants, significant natural communities; olive-sided flycatcher observed in wetland adjacent; natural veg along most of stream - followed by gravel road that is generally away from banks.
Ellis Brook	C	No TES, rare plants, significant natural communities; the section below NFS has one 0.9 mi stretch of natural vegetation, surrounded on either end by extensive development within the buffer; the NFS section has the largest extent of natural vegetation and includes a large complex of streamside wetlands, probably beaver influenced.

Table D-4: Ecological/Botanical Resource Comments on Outstandingly Remarkable Values		
STREAM	Rank	COMMENT
Fayville Branch	B	Includes extensions; no TES, rare plants, or significant natural communities; there are three segments that are in natural vegetation - one in the valley portion is a stretch from Rte 313 to Rte 7; another is from where Rte 7 leaves the segment up to the FR 307 crossing with a house; the longest is from there to the end.
Feller Brook	B	The upper part of this stream feeds into Wallingford Pond within the buffer, which is a significant botanical hotspot. The species are associated with the pond (which is really an historic/beaver dam of Feller Brook), but not with the lower reaches of Feller Brook. There are 4 stretches of this segment (each 0.6 mi long except for one of 0.8 mi long) that are natural, that are interrupted by upland openings agriculture and development, or paved roads - the upper part is most natural.
Glastenbury River	B	No TES, rare plants, significant natural communities; entire stretch is dominated by natural vegetation; stream is followed by dirt road but is not likely a fragmenting feature; one small opening near Deerfield confluence.
Gould Brook	B	No TES, rare plants, significant natural communities; two large portions of segment in natural vegetation - one 1.9 mi long and one 1.4 mi long; interrupted by paved road in the middle.
Greendale Brook	B	Jenkins (1988) evaluated this stream in his outstanding rivers and streams report for VT; no TES, rare plants, or significant natural communities; Jenkins noted between 3.5-4 miles of natural vegetation within a 4.5 mi stretch from headwaters to source; fragmenting features included old clear-cuts (close to 25 years old now) along the corridor and old and current agriculture within 1-0.5 mi of mouth. There is a gravel road that follows the stream along this segment and Jenkins did not consider it a fragmenting feature. There have been no obvious changes to the character of the stream since 1988.
Hancock Branch	B/C	No TES, rare plants, significant natural communities; much of segment developed intermittently along banks and State Highway 125 follows banks as well; paved road along part of Texas Falls access - counted natural vegetation only from where paved road ended to end of stream segment. 0.9 mi rounded to 1.0 would be just enough to give this a B for natural vegetation.
Hell Hollow Brook	B	No TES, rare plants, significant natural communities; most of stream in natural vegetation except at the Bolles Brook confluence where there's some development and roading.
Homer Stone Brook	C	No TES, rare plants, significant natural communities; most of the segment is in natural vegetation but the woods road that follows the middle portion crosses the stream 10x over a stretch of less than a mile and so is considered fragmenting.
Jimmy Dean Brook	B	No TES, rare plants, significant natural communities; most of stream in natural vegetation except near proclamation boundary; small woods road follows stream in parts but not a fragmenting feature.
Lake Brook	B	Lake Brook arises out of Griffith Lake, which is within the buffer and a botanical hotspot; the rare plants are associated with the lake and wetlands at the headwaters; the lake is an S3 community but is B/C ranked. Natural vegetation from headwaters to intersection with roads and then to cutting units at other end.

Table D-4: Ecological/Botanical Resource Comments on Outstandingly Remarkable Values

STREAM	Rank	COMMENT
Leicester Hollow Brook	A	This stream is significant both for its rare plant occurrences and its stretch of natural vegetation; there is an old woods road that follows the stream, but it is closed to vehicles and is not a fragmenting feature at this time.
Mad Tom Brook	C	No TES, rare plants, significant natural communities; natural vegetation only along the upper portion of segment, with the remainder interrupted by development and agriculture.
Meadow Brook	C	No TES; uncommon plant in the buffer on private, significant natural communities; natural vegetation over much of length, especially upper reaches; some stream instability noted in landslide patches along stream.
West Branch of Tweed River	B	No TES, rare plants, or significant natural communities; most of stream in natural vegetation; a road and jeep trail follow the stream along different parts of segment but are either not very close or not very fragmenting; a mine that may provide potential habitat for bats is associated with this stream.
Middlebrook	B	No TES, rare plants, or significant natural communities; most of stream in natural vegetation except near the proclamation boundary.
Middlebury River	B/C	No known rare elements; the natural stretch is along an outstanding hemlock gorge that probably should be noted as an A-ranked natural community by NHP, but the second half of stream is bordered right along the bank by Rte 125.
Middlebury No Br.	A	Based on rare plants; natural over a very nice stretch of upland woods but remainder bordered very closely by residential and power line clearing.
Middlebury So Br.	C	No known rare elements; the natural stretch proceeds from the Ripton-Goshen Rd all the way to Bread Loaf Campus - except for the Wayside which is not really fragmenting, the remainder of the course is generally wooded along the banks; Rte 125 follows banks up to the Ripton-Goshen Rd.
Mount Tabor Brook	B	No known TES, rare plants, significant natural communities; while it's entire stretch is natural and makes it a B, it's not long enough to be an A.
Rake Branch	B	No known TES, rare plants, significant natural communities; most of segment is natural except at the end at the Deerfield River and road crossing where there are some open areas that may be old farmland.
Redfield Brook	B	No known TES, rare plants, significant natural communities; all of segment is natural; the upper reaches towards Little Pond Brook consists of a complex of wetlands and the stand data for part of the area indicated the area should be considered for inclusion in significant features inventory; uncertain if the complex is entirely natural or whether FS is managing it with fire.
Sargent Brook	B	No TES, rare plants, or significant natural communities; natural veg on large portions of segment; woods road has a section where it has several crossings that I've interpreted as fragmenting, and there's a paved road crossing I've called fragmenting, but the remainder is natural.

Table D-4: Ecological/Botanical Resource Comments on Outstandingly Remarkable Values		
STREAM	Rank	COMMENT
Stamford Stream	A	The wetland complex at the head of this segment is a significant natural community for the presence of 2 uncommon species and a diverse array of beaver-influenced wetlands. There is a road that follows the segment through much of its length, but it's unclear whether it's a fragmenting feature; there is one small private parcel and house in the middle of the segment but it's not extensive enough to count against the overall natural vegetation throughout; depending on the road type the natural vegetation may be reduced.
Steam Mill Brook	C	Recent harvesting (early 1990s) along the upper reaches, as well as WL openings further downstream make very little of this stream "natural", although it will likely become more natural within next 20 years.
Stetson Brook	C	No TES or communities; river mostly natural but appears to have some development along a 0.4 mi stretch in the middle of segment; gravel road follows banks most of way but not likely a fragmenting feature in general.
So Fork Roaring Branch	B	No TES, rare plants, natural communities; full extent of segment appears in natural vegetation; there is some open area 0.2 mi from upper end of segment but unclear if natural or old field succession.
Townsend Brook	B	Includes extension; no TES or rare plants; significant natural community at North Pond - S3; most of segment in natural vegetation except near proclamation boundary and WL opening.
Utleigh Brook	B	Jenkins (1988) evaluated this stream in his outstanding rivers and streams report for VT; no TES, rare plants, or significant natural communities; Jenkins noted that when this stream is taken to its headwaters at Moses Pond, and includes Mount Tabor Brook, the trib. from Peabody Pond, and the southern branch, the stream ranks as Highly Important - having a stretch of about 6 miles from headwaters of Mt Tabor Brook to confluence with Griffith Brook that is natural - only about 25 such stretches in VT, most (17) in NE Kingdom, only 5 with substantial public ownership.
West Branch of White River (aka West Branch)	C	Most of segment is bordered by State Highway 73 or agriculture; one small stretch pulls away from 73 and that appears to be the only piece of decent natural vegetation there; not TES, rare plants or significant natural communities.
West Branch of Deerfield River (aka Deerfield West Branch)	B	No TES or significant natural communities; there are two rare plants from the buffer at the confluence with the Deerfield - not on NFS and in artificially maintained habitat; majority of extent of segment followed closely by Vermont State Rte 100, a fragmenting feature; only the upper reaches have decent natural vegetation.

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